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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,166	07/15/2003	Christopher Douglas Mowery	KCC 4965 (K-C 18, 772)	9504
321	7590	02/24/2006	EXAMINER	
SENNIGER POWERS ONE METROPOLITAN SQUARE 16TH FLOOR ST LOUIS, MO 63102			EDWARDS, LAURA ESTELLE	
			ART UNIT	PAPER NUMBER
			1734	

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/620,166	Applicant(s) MOWERY ET AL.	
	Examiner Laura Edwards	Art Unit 1734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-23 is/are allowed.
- 6) ☒ Claim(s) 1-5 and 9-12 is/are rejected.
- 7) ☒ Claim(s) 6-8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-5 and 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Rochmann (EP 0719591) for reasons cited in the previous office action.

Claims 1-5 and 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Ziecker et al (US 5,265,800) for reasons cited in the previous office action.

Allowable Subject Matter

Claims 6-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 13-23 would be allowable.

Claims 6 and 7 would be allowable because there is no teaching or suggestion in the prior art of an apparatus for depositing a pattern of fluid material onto a substrate moving in a machine direction, said apparatus comprising the combination of at least first and second nozzle units substantially aligned in a direction of alignment; a delivery system for delivering said material to said nozzle units, said delivery system comprising a manifold having first and second supply ports located one above the other for supply of material to the nozzle units, and a transfer plate

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disposed between the manifold and the nozzle units, said nozzle units being secured to said transfer plate, supply passaging in the transfer plate for the delivery of material from the manifold supply ports to said nozzle units, said supply passaging comprising a first elongate supply channel in a first face of the transfer plate in fluid communication with said first supply port in the manifold, and a second elongate supply channel in said first face of the transfer plate in fluid communication with said second supply port in the manifold, said first and second supply channels extending in said direction of alignment and being located one above the other in stacked relation; and a mounting system for mounting said transfer plate on the manifold, said mounting system allowing adjustment of the position of the transfer plate and nozzle units thereon relative to the manifold in said direction of alignment, said manifold supply ports remaining in fluid communication with respective supply channels during said adjustment, and a first recirculation unit mounted on said transfer plate, said first recirculation unit having an inlet port for receiving said material and an outlet port, a second recirculation unit mounted on said transfer plate, said second recirculation unit having an inlet port for receiving said material and an outlet port, a control system for selectively directing said material either to a nozzle unit or to a respective recirculation unit for recirculation back to the manifold, and a return port in the manifold for receiving material from the first and second recirculation units.

Claim 8 would be allowable because there is no teaching or suggestion in the prior art of an apparatus for depositing a pattern of fluid material onto a substrate moving in a machine direction, said apparatus comprising the combination of at least first and second nozzle units substantially aligned in a direction of alignment; a delivery system for delivering said material to

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said nozzle units, said delivery system comprising a manifold having first and second supply ports located one above the other for supply of material to the nozzle units, and a transfer plate disposed between the manifold and the nozzle units, said nozzle units being secured to said transfer plate, supply passaging in the transfer plate for the delivery of material from the manifold supply ports to said nozzle units, said supply passaging comprising a first elongate supply channel in a first face of the transfer plate in fluid communication with said first supply port in the manifold, and a second elongate supply channel in said first face of the transfer plate in fluid communication with said second supply port in the manifold, said first and second supply channels extending in said direction of alignment and being located one above the other in stacked relation; and a mounting system for mounting said transfer plate on the manifold, said mounting system allowing adjustment of the position of the transfer plate and nozzle units thereon relative to the manifold in said direction of alignment, said manifold supply ports remaining in fluid communication with respective supply channels during said adjustment, a first recirculation unit mounted on the transfer plate, the first recirculation unit having an inlet port for receiving the material and an outlet port, a control system for selectively directing the material either to the first nozzle unit or to the first recirculation unit for recirculation back to the manifold, a return port in the manifold for receiving material from the first recirculation unit, and first recirculation passaging in the transfer plate comprising a first inflow recirculation passage providing fluid communication between said first manifold supply port and the inlet port of the first recirculation unit, and a first outflow recirculation passage providing fluid communication between the outlet port of the first recirculation unit and the return port of the manifold, said first outflow recirculation passage comprising a return channel in said first face of the transfer plate in

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fluid communication with said manifold return port, said return channel extending in said direction of alignment and being spaced from said first and second supply channels so that all three channels are in stacked relation to one another.

Claims 13-15 would be allowable because there is no teaching or suggestion in the prior art of an apparatus for depositing a pattern of fluid material onto a substrate moving in a machine direction, said apparatus comprising the combination of a nozzle unit having an inlet port for receiving said material and a nozzle for depositing said material on said substrate, a recirculation unit having an inlet port for receiving said material and an outlet port, a delivery system for delivering said material to said nozzle unit, said delivery system comprising a control system for selectively directing said material either to the nozzle unit for dispensing on said substrate or to the recirculation unit for recirculation, a manifold having a supply port for supply of material to the inlet port of the nozzle unit, and a return port for receiving material from the recirculation unit, a transfer plate having a first face facing said manifold, first supply passaging in the transfer plate providing fluid communication between said manifold supply port and the inlet port of the nozzle unit, said supply passaging comprising an elongate channel in said first face of the transfer plate, first recirculation passaging in the transfer plate comprising a first inflow recirculation passage providing fluid communication between said manifold supply port and the inlet port of said recirculation unit, and a first outflow recirculation passage providing fluid communication between the outlet port of the recirculation unit and the return port of the manifold, said outflow recirculation passage comprising an elongate return channel in said first face of the transfer plate in a generally stacked relation with said supply channel, the nozzle unit

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and recirculation unit being attached to the transfer plate with the inlet port of the nozzle unit in fluid communication with said supply passaging in the transfer plate, with the inlet port of the recirculation unit in fluid communication with said inflow recirculation passage in the transfer plate, and with the outlet port of said recirculation unit in fluid communication with said outflow recirculation passage in the transfer plate, and the transfer plate being mounted on said manifold with said supply channel in the transfer plate in fluid communication with said manifold supply port and with said return channel in the transfer plate in fluid communication with said manifold return port.

Claims 16-23 would be allowable because there is no teaching or suggestion in the prior art of an apparatus for depositing a pattern of fluid material onto a substrate moving in a machine direction, said apparatus comprising the combination of a nozzle unit having an inlet port for receiving said material and a nozzle for depositing said material on said substrate, at least a first recirculation unit having an inlet port for receiving said material and an outlet port; a delivery system comprising a control system for selectively directing said material either to the nozzle unit for dispensing on said substrate or to the recirculation unit for recirculation; a manifold having a first supply port for supply of material to the inlet port of the nozzle unit, and a return port for receiving material from the recirculation unit; a transfer plate secured to said manifold, said transfer plate having a first face facing said manifold; first supply passaging in the transfer plate providing fluid communication between said manifold supply port and the inlet port of the nozzle unit; and first recirculation passaging in the transfer plate comprising a first inflow recirculation passage providing fluid communication between said manifold supply port and the

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inlet port of said recirculation unit, and a first outflow recirculation passage providing fluid communication between the outlet port of the recirculation unit and the return port of the manifold; the nozzle unit and recirculation unit being attached to the transfer plate with the inlet port of the nozzle unit in fluid communication with said supply passaging in the h transfer plate, with the inlet port of the recirculation unit in fluid communication with said inflow recirculation passage in the transfer plate, and with the outlet port of said recirculation unit in fluid communication with said outflow recirculation passage in the transfer plate.

Response to Arguments

Applicant's arguments filed 12/20/05 have been fully considered but they are not persuasive.

Applicants contend that neither Rochmann et al nor Ziecker et al teach or suggest 1) a manifold having first and second supply ports located one above the other and 2) first and second elongate supply channels in the first face of the transfer plate. This argument is not deemed persuasive because Rochmann et al provide a manifold having first and second supply ports (30, 31) located one above the other for supplying "fluid material" which includes liquid and/or gas. Rochmann et al provide first and second elongated supply channels (34, 35) as shown in Fig. 6. Ziecker et al pretty much repeat the teachings of Rochmann et al providing a manifold having first and second supply ports (28, 20) located one above the other for supplying "fluid material" which includes liquid and/or gas. Ziecker et al further provide first and second elongated supply channels (24, 40) as shown in Fig. 7.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura Edwards whose telephone number is (571) 272-1227. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Laura Edwards
Primary Examiner
Art Unit 1734

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February 21, 2006